

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1-19. (Cancelled)

20. (New) An external component of a cochlear implant hearing system, comprising:

a speech processor module comprising a housing, processing circuitry that receives signals output by a microphone, and one or more connectors; and

a protective case configured to interface with said one or more connectors, wherein said speech processor module is configured to be removably mountable within said case,

wherein when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit.

21. (New) The external component of claim 20, wherein said case comprises:

a base member; and

a cover member matable with said base member to form an enclosure,

wherein when said cover member and said base member are attached to each other, said case is at least resistant to fluid ingress.

22. (New) The external component of claim 20, wherein said microphone is an internal microphone mounted on or within said housing of said speech processor module, and wherein said speech processor module is configured to receive signals output from said internal microphone.

23. (New) The external component of claim 20, wherein said microphone is external to said speech processor module, and wherein said speech processor module is configured to receive and process signals output from said microphone external to said speech processor module.

24. (New) The external component of claim 20, wherein said speech processor module is configured to be operably connected to a power supply.

25. (New) The external component of claim 24, wherein said one or more connectors comprise electrical pin connectors, and wherein said protective case is configured to facilitate an electrical interface between said pin connectors with said power supply.

26. (New) The external component of claim 21, wherein said case is adapted to prevent all fluid ingress when said cover member is closed relative to said base member.

27. (New) The external component of claim 21, wherein said case is adapted to at least substantially prevent dust ingress when said cover member and said base member are mated to each other.

28. (New) The external component of claim 21, wherein said case further comprises:
a sheath with a gasket around the perimeter thereof, wherein said sheath overlies said speech processor module when said speech processor module is mounted in said base member, and wherein said gasket and said sheath, when in position, can seal with a perimeter wall of said base member.

29. (New) The external component of claim 20, wherein said one or more connectors comprise a cable connector for receiving a cable, and wherein said case comprises an orifice configured to interface with said cable inserted in said cable connector, and wherein a grommet is provided to prevent fluid from entering said orifice.

30. (New) A cochlear implant, comprising:

a speech processor module comprising a housing, processing circuitry that receives signals output by a microphone, and one or more connectors; and

a protective case configured to interface with said one or more connectors, wherein said speech processor module is configured to be removably mountable within said case,

wherein when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit.

31. (New) The implant of claim 30, wherein said case comprises:

a base member; and

a cover member matable with said base member to form an enclosure,

wherein when said cover member and said base member are attached to each other, said case is at least resistant to fluid ingress.

32. (New) The implant of claim 30, wherein said microphone is an internal microphone mounted on or within said housing of said speech processor module, and wherein said speech processor module is configured to receive signals output from said internal microphone.

33. (New) The implant of claim 30, wherein said microphone is external to said speech processor module, and wherein said speech processor module is configured to receive and process signals output from said microphone external to said speech processor module.

34. (New) The implant of claim 30, wherein said speech processor module is configured to be operably connected to a power supply.

35. (New) The implant of claim 34, wherein said one or more connectors comprise electrical pin connectors, and wherein said protective case is configured to facilitate an electrical interface between said pin connectors with said power supply.

36. (New) The implant of claim 31, wherein said case is adapted to prevent all fluid ingress when said cover member is closed relative to said base member.

37. (New) The implant of claim 31, wherein said case is adapted to at least substantially prevent dust ingress when said cover member and said base member are mated to each other.

38. (New) The implant of claim 31, wherein said case further comprises:

a sheath with a gasket around the perimeter thereof, wherein said sheath overlies said speech processor module when said speech processor module is mounted in said base member, and wherein said gasket and said sheath, when in position, can seal with a perimeter wall of said base member.

39. (New) The implant of claim 30, wherein said one or more connectors comprise a cable connector for receiving a cable, and wherein said case comprises an orifice configured to interface with said cable inserted in said cable connector, and wherein a grommet is provided to prevent fluid from entering said orifice.

40. (New) A method for using a cochlear implant hearing system, comprising:

operating a speech processor module having a housing and processing circuitry that receives signals output by a microphone as a component of a behind-the-ear (BTE) speech processing unit; and

removably mounting said speech processor module in a protective case, wherein when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit not as a component of a BTE speech processing unit; and

operating said speech processor module as a component of a BTE speech processing unit.

41. (New) The method of claim 40, wherein when said speech processor module is not mounted in said case, said speech processor module has an earhook and power supply attached thereto, said method further comprising:

detaching said earhook and power supply from speech processor module prior to mounting said speech processor module in said case.

42. (New) The method of claim 40, wherein said speech processor module comprises one or more connectors, and wherein removably mounting said speech processor module in said case comprises:

interfacing said case with said one or more connectors.

43. (New) The method of claim 42, wherein said one or more connectors comprise electrical pin connectors, and wherein said protective case is configured to facilitate an electrical interface between said pin connectors with said power supply.

44. (New) The method of claim 40, wherein said case comprises:

a base member; and

a cover member matable with said base member to form an enclosure,

wherein when said cover member and said base member are attached to each other, said case is at least resistant to fluid ingress.

45. (New) The method of claim 44, wherein said case is adapted to prevent all fluid ingress when said cover member is closed relative to said base member.

46. (New) The method of claim 44, wherein said case is adapted to at least substantially prevent dust ingress when said cover member and said base member are mated to each other.